

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 108 AND TEN OAKS RD., IN HOWARD COUNTY. MD 108 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION. THIS WORK IS NECESSITATED BY GEOMETRIC IMPROVEMENTS IN THE NORTH-EAST CORNER OF THE INTERSECTION AND WILL INVOLVE REPLACEMENT OF HANDHOLES, CONDUIT, WIRING, AND DETECTION.

CONTROLLER OPERATION

THE EXISTING EIGHT-PHASE, FULLY ACTUATED NEMA CONTROLLER HOUSED IN A BASE MOUNTED CABINET WILL BE USED. THE CONTROLLER CURRENTLY OPERATES AS A FOUR PHASE FULL-TRAFFIC-ACTUATED CONTROLLER. THIS OPERATION WILL NOT BE CHANGED.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY SHA AND INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
NONE		

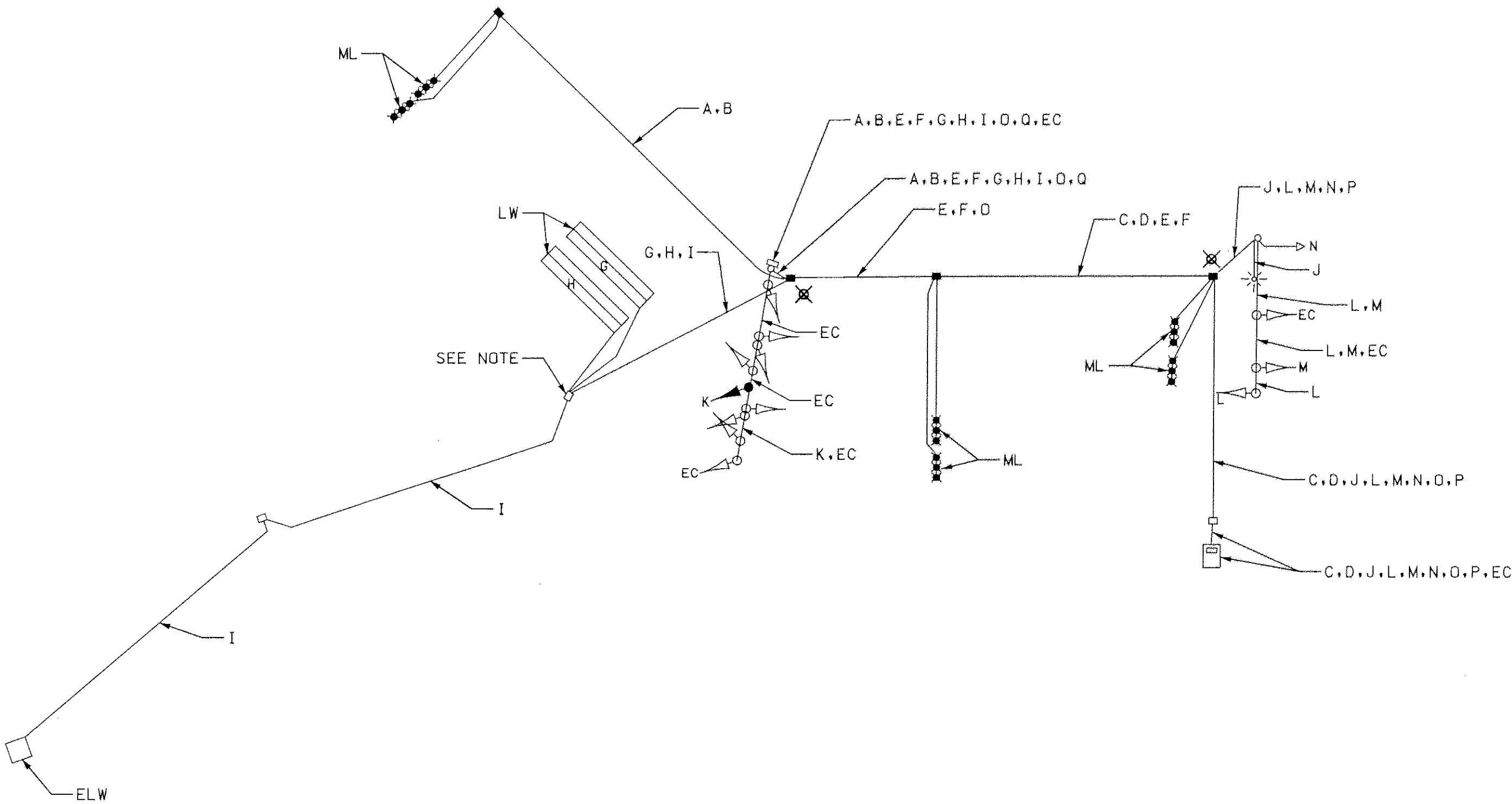
EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
5004	60 LF	FURNISH AND INSTALL 24 IN. HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5001	300 L.F.	FURNISH AND INSTALL 5 IN. YELLOW HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5002	600 L.F.	FURNISH AND INSTALL 5 IN. WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING
5005	16 EA	FURNISH AND INSTALL PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTER
5006	8 EA	FURNISH AND INSTALL PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROWS
8016	6 EA	FURNISH AND INSTALL MICRO-LOOP PROBE WITH 500 FT. LEAD-IN
8021	460 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8023	60 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8024	120 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8030	110 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
8032	230 LF	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT-BORED
8033	4 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8034	2 EA	FURNISH AND INSTALL GROUND ROD -3/4" X 10'
8039	320 L.F.	FURNISH AND INSTALL 12-PAIR COMMUNICATION CABLE, JELLY-FILLED (UNDERGROUND)
8040	930 LF	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8041	210 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8043	140 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 A.W.G.)
8044	25 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
8045	400 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
8046	170 LF	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
8048	110 LF	FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
8060	1 EA	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
8061	1 EA	INSTALL 4 IN. CONDUIT BEND INTO EXISTING BASE
---	1 EA	RELOCATE EXISTING SIGNAL HEAD

WIRING DIAGRAM

NOTE: DISCONNECT EXISTING 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED) FROM CONTROLLER AND REINSTALL THROUGH NEW CONDUIT.



WIRING KEY

A-F	MICRO-LOOP PROBE
G-H	2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
I	EXISTING 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.) ALUMINUM SHIELDED
J	2 CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.)
K	5 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
L-M	7 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
N	3 CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
O	12-PAIR VOICE GRADE INTERCONNECT CABLE
P-Q	STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
LW	LOOP WIRE (NO. 14 A.W.G.)
ELW	EXISTING LOOP WIRE
EC	EXISTING CABLE
ML	MICRO-LOOP PROBE
X	GROUND ROD

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANDOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO.	QUANTITY	DESCRIPTION
NONE		



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET

MD 32/MD108 AND TEN OAKS ROAD

DRAWN BY: T.M.Z  
CHECKED BY: K.W.S  
SCALE: NONE  
DATE: 5-26-01

F.A.P. NO.  
S.H.A. NO.  
COUNTY: HOWARD  
LOG MILE: 13010808.62

TS NO.  
2238B  
T.J.M.S. NO.

SHEET NO.  
2 OF 3